ALL PENDING CLAIMS, AS AMENDED

1. **(Amended)** A system for maintaining fill material solids in position to form a barrier or dam, the system comprising:

(a) a first elongated sheet of geotextile material;

(b) a means for seaming the first elongated sheet into a first continuous tubular-shaped container having an inside space;

(c) at least two ballast tubes disposed within said inside space of the container; and

(d) fill material solids held inside the ballast tubes;

(e) wherein the fill material solids are held in position by the ballast tubes and the first tubular-shaped container to form a barrier or dam.

2. **(Amended)** The system of claim 1 wherein the first tubular-shaped container additionally comprises a second elongated sheet.

3. **(Amended)** The system of claim 2 wherein the second elongated sheet is coiled into a second tubular-shaped container within the inside space of the first tubular-shaped container, thereby forming a tubular container having an inner liner.

4. **(Amended)** The system of claim 1 in which the first continuous tubular-shaped container is formed by stitching, gluing or heat bonding a geotextile material into a tubular shape.

5. The system as set forth in claim 1 whereby said tubular-shaped container comprises opposed ends that are closed to form a barrier or dam.

6. **(Am nd d)** A system for maintaining fill material solids in position to form a barrier or dam, the system comprising:

(a) a,first elongated sheet of geotextile material;

(b) a means for seaming the first elongated sheet into a first continuous tubular-shaped container having an inside space;

(c) at least two ballast tubes disposed within said inside space of the container;

(d) fill material solids held inside the ballast tubes; and

(e) a first cradle tube positioned adjacent to the first continuous tubular-shaped container, the cradle tube being configured to maintain the first tubular-shaped container in a stable position to form a barrier or dam.

8. The system of claim 6 additionally comprising a second cradle tube.

11. The system of claim 6 in which filler tubes are located within a cradle tube.

13. The system of claim 6, further comprising a scour apron disposed beneath said container and said cradle tube.

14. The system of claim 13 in which the scour apron is comprised of one or more anchor tubes and a blanket.

15. The system of claim 13 wherein the scour apron is located beneath the first tubular-shaped container.

16. **(Amended)** An apparatus for forming a barrier, comprising:

(a) an elongated container; and

(b) a plurality of independent ballast tubes within the container, the ballast tubes each having an inside and an outside space, the ballast tubes having fill material solids on their respective inside spaces, each ballast tube being enclosed such that there is no substantial communication or flow between independent ballast tubes, each ballast tube being configured to maintain an independent solid fill level and pressure.

17. The apparatus of claim 16, further wherein the elongated container is substantially impermeable.

18. The apparatus of claim 16, further wherein the elongated container is made impermeable by: (i) coating a geotextile fabric which is employed as an elongated container, or (ii) by employing an impermeable geotextile fabric as an elongated container.

19. **(Amended)** The apparatus of claim 16 in which the elongated container is anchored in part by a scour apron having an anchor tube.

20. The apparatus of claim 19 in which the scour apron further comprises a blanket.

21. The apparatus of claim 19 wherein the scour apron supports the container on the underside of the container.

22. **(Amended)** A method of forming a barrier or dam using solid materials, comprising:

(a) providing an elongated container; and

(b) providing a plurality of independent ballast tubes within the elongated container, each ballast tube being enclosed such that there is no substantial communication or flow between independent ballast tubes;

(c) pumping a water/solids slurry into at least one ballast tube; and

(d) pumping a water/solids slurry into the elongated container.

23. A method of forming a barrier or dam using solid materials, comprising:

(a) providing an elongated container; and

(b) providing a plurality of independent ballast tubes within the container, each ballast tube being enclosed such that there is no substantial communication or flow between independent ballast tubes; and

(c) pumping a water/solids slurry into the ballast tubes.

24. **(Amended)** The method of claim 23 in which the pumping step (c) further comprises:

i) pumping water, followed by

ii) pumping a water/solids slurry into at least one ballast tube.

25. A structure that resists soil or sand erosion against high energy waves, comprising:

(a) an elongated container; and

(b) a plurality of independent ballast tubes within the container, the ballast tubes each having an inside and an outside space, the inside space having a lower portion and an upper portion, the ballast tubes being configured to receive fill material solids on their respective inside spaces;

(c) wherein at least one ballast tube contains solid fill material in a lower portion of the ballast tube and a liquid in the upper portion of the ballast tube, the upper portion of the ballast tube being capable of absorbing wave energy to maintain the structure in a stationary position.

26. The apparatus of claim 25 further comprising a first cradle tube positioned adjacent to the container.

27. The apparatus of claim 25, further comprising a scour apron.

28. The apparatus of claim 27 in which the scour apron further comprises an anchor tube.

29. The apparatus of claim 27 in which the scour apron further comprises a blanket.

30. The apparatus of claim 27 wherein the scour apron supports the container on the underside of the container.

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31. **(Amended)** A system for maintaining fill material solids in position to form a barrier or dam in a water environment, the system comprising:

(a) a first elongated tube having an interior and exterior, the tube being made of impermeable geotextile material; and

(b) a plurality of ballast tubes located within the first elongated tube, the ballast tubes being generally semi-permeable;

(c) wherein fill material solids are held in position within at least one of said ballast tubes, and water is capable of moving into or out of ballast tubes, the overall barrier or dam being essentially watertight on its exterior surface due to

impermeability of the geotextile material, thus resulting in minimal net water flow to the exterior of the first elongated tube.

32. **(Amended)** The system of claim 31 wherein the first elongated tube of geotextile material comprises a coating on the exterior surface of said material.

33. The system of claim 31 wherein the first elongated tube of geotextile material is comprised of base fibers selected from the group of fibers consisting of: polyester, polypropylene, and synthetic fibers.

34. The system of claim 33 wherein the coating is compatible with the base polymeric fibers, and is selected from the group of coatings consisting of: polyvinyl chloride, polyethylene, and polypropylene.

35. **(Amended)** A system for maintaining fill material solids in position to form a barrier or dam in a water environment, the system comprising:

(a) a first elongated tube having an interior and exterior, the tube being made of partially permeable geotextile material having an inner liner of substantially waterproof fabric; and

(b) a plurality of ballast tubes located within the first elongated tube, the ballast tubes being generally semi-permeable;

(c) wherein fill material solids are held in position within at least one of the ballast tubes, and water is capable of moving into or out of the ballast tubes, the overall barrier or dam being essentially watertight on its exterior surface due to impermeability of the liner material, thus resulting in minimal net water flow to the exterior of the first elongated tube.

37. **(Amended)** The container of claim 42 wherein the container is secured along its length by hoops.

38. The container of claim 37 wherein the hoops are comprised of a plurality of thicknesses of geotextile fabric.

39. **(Amended)** The container of claim 42 in which a spiral belt is provided along the length of the container.

40. **(Amended)** The container of claim 39 in which the belt provides enhanced resistance to elongation of the container under stress.

41. **(Amended)** The container of claim 39 in which the belt is on the outside of the container.

42. **(Amended)** A tubular apparatus for forming a barrier, comprising:

(a) an elongated fabric container having two ends;

(b) a plurality of independent ballast tubes extending longitudinally within the container, the ballast tubes each having an inside and an outside space, the ballast tubes having fill material solids on their respective inside spaces; and

(c) a plurality of longitudinally spaced reinforced regions along the length of the elongated container, the reinforced regions being supportive of the elongated container and providing a greater resistance to stress than the fabric of the container.

43. The apparatus of claim 42 additionally comprising:

(d) a longitudinal belt, the belt being secured to the longitudinally spaced reinforced regions, thereby providing additional stability to the barrier.

44. **(Am nded)** A tubular apparatus for forming a barrier, comprising:

an elongated fabric having two ends, the fabric being helically shaped and joined at a spiral seam by draping the fabric over a cylindrical drum and securing the spiral seam, thereby forming a tubular elongated container, wherein the apparatus further comprises at least one ballast tube within the container.

45. (New) An apparatus for forming a barrier, comprising:

a) an impermeable elongated fabric container having an interior and an exterior;

b) at least two ballast tubes disposed within the interior of the elongated fabric container, each of the at least two ballast tubes containing water; and

c) wherein each of the at least two ballast tubes is configured to be semi-permeable so that the water can pass between each of the at least two ballast tubes and the interior of the container and between one of the at least two ballast tubes and the other of the at least two ballast tubes.

46. (New) The apparatus of claim 45, wherein the container is rendered impermeable by a coating applied to the fabric.

47. (New) The apparatus of claim 46, wherein the coating is applied to the exterior of the container.

48. (New) The apparatus of claim 46, wherein the coating is applied to the interior of the container.

49. (New) The apparatus of claim 45, wherein the container is rendered impermeable by an impermeable liner that is disposed adjacent the interior surface of the container.

50. (New) The apparatus of claim 45, wherein the container is rendered impermeable by an impermeable liner that is disposed around and encloses the at least two ballast tubes in the interior of the container.

51. (New) The apparatus of claim 45, further comprising solid fill materials disposed within the interior of the container.

52. (New) The apparatus of claim 45, further comprising:

a plurality of transverse reinforced regions disposed along the length of the elongated container, the transverse reinforced regions being configured to provide structural support to the container.

53. (New) The apparatus of claim 52, wherein each said transverse reinforced region comprises at least one belt.

54. (New) The apparatus of claim 52, wherein each said transverse reinforced region comprises at least one hoop.

55. (New) The apparatus of claim 52, wherein each said transverse reinforced region comprises at least one anchoring strap.

56. (New) The apparatus of claim 52, wherein each reinforced region comprises at least one rib.

57. (New) The apparatus of claim 52, wherein each reinforced region extends once circumferentially around the container and in a direction that is generally transversely to the longitudinal axis of the container.

58. (New) The apparatus of claim 52, wherein each reinforced region extends helically around the circumference of the container.

59. (New) The apparatus of claim 52, wherein at least one reinforced region comprises at least two thicknesses of fabric.

60. (New) The apparatus of claim 52, wherein the reinforced regions are disposed on the outside of the container.

61. (New) The apparatus of claim 52, wherein the reinforced regions are disposed on the inside of the container.

62. (New) An apparatus for forming a barrier, comprising:

a) an elongated fabric container having two ends and a plurality of ballast tubes within the elongated fabric container; and

b) a plurality of transverse reinforced regions along the length of the elongated container, the transverse reinforced regions being configured to provide structural support to the container.

63. (New) The apparatus of claim 62, wherein each said transverse reinforced region comprises at least one hoop.

64. (New) The apparatus of claim 62, wherein each transverse reinforced region comprises at least one anchoring strap.

65. (New) The apparatus of claim 62, wherein each reinforced region comprises at least one rib.

66. (New) The apparatus of claim 62, wherein at least one reinforced region comprises at least two thicknesses of fabric.

67. (New) The apparatus of claim 62, wherein each of the transverse reinforced regions comprises at least one anchoring strap.

68. (New) The geotube barrier of claim 67, wherein each of the anchoring straps is connected by a longitudinal seam extending along the length of the elongated container.

69. (New) The apparatus of claim 62, wherein the tube is constructed by seaming together the container at the transverse reinforced regions.

70. (New) The apparatus of claim 62, wherein the reinforced regions are disposed on the outside of the container.

71. (New) The apparatus of claim 62, wherein the reinforced regions are disposed on the inside of the container.

72. (New) The apparatus of claim 62, further comprising at least two ports defined along the length of the container.

~~73. (New) A system for maintaining material solids in position to form a~~ barrier in a water environment, the system comprising:

(a) a first elongated tube having an interior surface and exterior, the tube being comprised of partially permeable fabric, the tube comprising transverse reinforced regions along its length, and

(b) a liner, the liner being affixed to the interior surface of the tube and impermeable to water,

(c) wherein fill material solids and water are held in position within the tube, the overall barrier being essentially watertight on its exterior fabric surface due to impermeability of the liner material, thus resulting in minimal net water flow to the exterior of the first elongated tube.

74. (New) The system of claim 73, wherein the tube is constructed using high strength seaming techniques.

75. (New) The system of claim 73, wherein the tube comprises a series of ~~outlet ports for release of excess water from the tube.~~

76. (New) A cylindrical geotube water barrier having an inner surface formed by longitudinal seaming, comprising:

an elongated fabric container having two ends and at least two seams, the container being formed by joining together at one of said at least two seams at least two cylindrical tubular sections to form a transversely oriented reinforced region along the length of the geotube, the transverse reinforced region being configured to provide structural support to the geotube container with a high resistance to mechanical damage; and

at least one ballast tube disposed on the inner surface of the container.

77. (New) The cylindrical geotube water barrier of claim 76, wherein the reinforced regions comprise anchoring straps.